

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

October 2, 1981

R. H. LEASBURG
VICE PRESIDENT
NUCLEAR OPERATIONS

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303


Serial No. 556
NO/RMT:acm
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Dear Mr. O'Reilly:

We have reviewed your letter of September 4, 1981 in reference to the inspection conducted at Surry Power Station between June 1-July 31, 1981 and reported in IE Inspection Report Nos. 50-280/81-22 and 50-281/81-22. Our responses to the specific infractions are attached.

We have determined that no proprietary information is contained in the reports. Accordingly, the Virginia Electric and Power Company has no objection to these inspection reports being made a matter of public disclosure. The information contained in the attached pages is true and accurate to the best of my knowledge and belief.

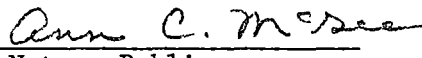
Very truly yours,


R. H. Leasburg

Attachment

City of Richmond
Commonwealth of Virginia

Acknowledged before me this 2nd day of Oct., 1981


Notary Public

My Commission expires: 2-26, 1985

SEAL

cc: Mr. Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing

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PDR ADOCK 05000280
Q PDR

RESPONSE TO NOTICE OF VIOLATION
9/4/81, 81-22

NRC COMMENT

- A. Technical Specification 3.7.B requires the minimum degree of redundancy of one be maintained for the overpower and overtemperature delta temperature protection system as provided in TS table 3.7.1 or the plant be placed in hot shutdown.

Contrary to the above, on July 9, 1981 the minimum degree of redundancy was reduced to zero for the overpower and overtemperature delta temperature protection systems. Corrective action was initiated but erroneously discontinued without returning the degree of redundancy to one by tripping the channel. The condition was corrected about twelve hours later.

This is a Severity Level IV Violation (Supplement I.D.2).

RESPONSE

1. The violation is correct as stated. This event was identified by the Licensee and reported in LER 81-023.

2. Reason for the violation

The operational personnel failed to direct the instrument technical people to maintain the inoperable channel in the trip position, thus maintaining the required degree of redundancy. When management personnel arrived the next morning the channel was placed in the trip mode until the proper repairs were accomplished. The cause of the failure was improper wiring of the input leads.

3. Corrective steps to be taken and results achieved:

The wiring problem was corrected and the channel was returned to an operable status. The channel was removed from a trip condition.

4. Corrective steps to avoid further violations:

The operational personnel have been reinstructed in the Technical Specification requirements for redundant channels.

5. Date when full compliance will be achieved:

We are in full compliance at this time.

NRC COMMENT

- B. Criterion XVI of Appendix B to 10 CFR 50 and Section 16 of the VEPCO NPS QA Manual require that the identification of conditions adverse to quality, the cause of the condition, and the corrective action taken be documented and reported to appropriate levels of management. Administrative Procedure ADM-29, Conduct of Operations, requires that the Shift Supervisor and Control Room Operator (CRO) Logs contain detailed information of any abnormal conditions or problem areas, noting the time, the reasons and the corrective action taken on these items.

NRC COMMENT (continued)

Contrary to the above, on July 30, 1981, increasing Unit 2 reactor coolant system (RCS) leakage was identified on the midnight to 8:00 a.m. shift; however, the identification of this adverse condition, the cause, or the action taken to correct it was not documented in the Shift Supervisor or CRO logs, or on a Deviation Report, until 9:40 a.m. on July 30, 1981.

This is a Severity Level V Violation (Supplement I.E.), and applies to Unit 2.

RESPONSE

1. This violation is correct as stated.

2. Reason for violation:

An increase in leak rate was observed and the midshift was actively pursuing possible sources. The excessive leak rate was quantified and documented on the first part of day shift. The sources of leakage were identified and reviewed for safe continued operation within the time limit of the limiting condition of operation after quantifying the leak.

3. Corrective action which has been taken and results achieved:

A discussion was held between Corporate Management, Station Management, and Operations Department Supervisors which reinforced the importance of good log keeping practices.

4. Corrective action to avoid further violations:

The improved log keeping practices resulting from (3) above will avoid further violations.

5. Date when full compliance will be achieved:

We are in full compliance at this time.

NRC COMMENT

C. Criterion XIV of Appendix B to 10 CFR 50 and Section 14 of the VEPCO Nuclear Power Station QA Manual establish measures for indicating the operating status of structures, systems, equipment and components of the nuclear power station. Section 14 of the QA Manual, Part 5.2, requires that jumpers or temporary modifications including lifted electrical leads and electrical jumpers (wires), shall be properly controlled, documented, and approved, and shall be installed by an approved procedure or a "Jumper Log" form.

Contrary to the above, the control room annunciator alarm card IC-46, which contains electronics for the spent fuel pit high level alarm (CF6), was found pulled and inoperable without the proper controls, documentation, and approvals on June 3, 1981. The inoperable alarm contributed to the spent fuel pit overflowing and an unplanned radioactive release from the station on June 3.

This is a Severity Level V Violation (Supplement I.E.).

RESPONSE

1. Admission of the violation:

The violation is correct as stated. This was identified by the Licensee.

2. Reason for violation:

The card was removed with the authorization of the shift supervisor due to frequent nuisance alarms resulting from maintaining the spent fuel pool at a high level. The alarm was distracting to the operator. Being an alarm function only, the removal of a card was misinterpreted as not requiring a jumper or system modification.

3. Corrective steps which have been taken and results achieved:

The card was reinstalled thus returning the circuit to an operable status.

4. Corrective steps to avoid further violations:

Operational personnel were instructed to consider annunciator card removal a modification of the system and to document via the "Jumper Log" forms and approvals.

5. Date when full compliance will be achieved:

We are in full compliance at this time.

NRC COMMENT

- D. Technical Specification, Section 3.2.A, requires at least one flow path to the core for boric acid injection when fuel is in the reactor.

Contrary to the above, on June 12, 1981, Unit 1 did not have an operable flow path of borated water to the core with fuel in the reactor. The low head and high head safety injection systems were isolated and inoperable, and the flow path from the Refueling Water Storage Tank to the core through MOV-RH-100 was inoperable during cold shutdown conditions. Motor operated valve (MOV)-RH-100 was closed and failed to open when tested at the request of the inspector. Additionally, the specific system alignment for the boric acid flow path was not addressed in facility procedures.

This is a Severity Level V Violation (Supplement I.E.).

RESPONSE

1. The violation is correct as stated.

2. Reason for the violation:

The Technical Specification requires a flow path. There is no requirement that the flow path be a remotely operated or automatic delivery system. Often manual valves are utilized to provide operable flow paths in meeting Tech. Spec. required conditions. During this period of time the plant was depressurized to atmospheric conditions with the head removed. A reload core was installed with no assembly installed having less than eight months decay and cooling of fission products. Thus, a pretest to prove operability of the flow path was not interpreted to be

RESPONSE (continued)

necessary. The valve could be manually opened in sufficient time to provide required RCS inventory.

3. Corrective steps which have been taken and results achieved:

The MOV was physically opened manually and the makeup flow path verified to be available.

4. Corrective steps to avoid further violations:

An instruction will be developed to specify the necessary conditions to be satisfied in order to utilize MOV-RH-100 or others as required flow paths to the core.

5. Date when full compliance will be achieved:

The instruction for MOV-RH-100 or others will be completed by November 1, 1981.

NRC COMMENT

- E. Technical Specification 6.4.A requires that detailed written procedures with appropriate check-off lists and instructions shall be provided for plant operation and for calibration and testing of instruments, components and systems involving nuclear safety of the station.

Contrary to the above, the calibration procedure for the CAT level instrumentation (CAL-CS-005) was not appropriately revised prior to exceeding 350°F and 450 psig in the Unit 1 reactor coolant system on July 4, 1981, to reflect the density difference between pure water and the 17.5% (by weight) solution of sodium hydroxide in the CAT. When the density correction and recalibration was performed on July 4, 1981, the CAT level was at 82%, well below the minimum TS 3.4.A.4 level of 96.5%.

This is a Severity Level V Violation (Supplement I.E.).

RESPONSE

1. The violation is correct as stated.

2. Reason for the violation:

This violation is a result of an error in the original calibration procedure which did not account for density compensation.

3. Corrective action taken and results achieved:

Upon discovery of this deficiency, the level in the tank was increased to above the Tech. Spec. low limit. The Unit 2 (operating at that time) tank curve and calibration procedure were verified to be correct. The Unit 1 calibration procedure has been changed.

RESPONSE (continued)

4. Steps which will be taken to avoid further violations:

The Station Nuclear Safety and Operating Committee, in reviewing the event, discussed the possibility that other safety related tanks might be affected. It was concluded that all other safety related tank levels were adequate. No further action is deemed necessary.

5. Date when full compliance will be achieved:

Full compliance was achieved within 8 hours of the violation.

NRC COMMENT

- F. Technical Specification 4.1.A requires reactor containment pressure instrumentation and consequence limiting safeguards (CLS) systems to be tested monthly or prior to exceeding 350°F or 450 psig in the reactor coolant system.

Contrary to the above, the Periodic Test for CLS Hi-Hi containment pressure trains, were not performed during the Unit 1 steam generator replacement outage nor prior to exceeding 350°F and 450 psig in the Unit 1 reactor coolant system on July 4, 1981. An operability test was last performed on August 16, 1980, suspended during the outage, and subsequently performed on July 8, 1981, following inspector discussions with Licensee management.

This is a Severity Level V Violation (Supplement I.E.).

RESPONSE

1. The violation is correct as stated.

2. Reason for violation:

The reason for this violation was an apparent error in the cover sheets for these periodic tests which described the unit conditions requiring test as "unit operation stable at power." This deficiency had gone unnoticed through all Regulatory and Licensee reviews since original startup.

3. Action taken to date and results achieved:

Upon discovery of this deficiency, these procedures were reviewed to verify that they could, in fact, be performed safely with the unit shutdown or in start-up. Subsequent to this review the tests were scheduled to be performed as soon as possible. The tests were performed satisfactorily. Note: CLS functional testing, normal to re-fueling outages, had been performed within 2 months of the date of the inspection.

4. Scheduled action to avoid further violations:

The Licensee has performed a complete review of the Technical Specifications to verify accuracy and completeness of the Surveillance Test Program. PT's 8.4, 8.5 have been changed to include performance during unit shutdown conditions.

5. Date when full compliance will be achieved:

Full compliance has been achieved.